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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,472	Applicant(s) RAYMOND, COUTURE	
	Examiner Andrew J. Triggs	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15, 17-19 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15, 17-19 and 24-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/14/2008</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “intermediary mating member” of claim 12 and the “fastener with a distal tip at the end thereof” of claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-13, 15, 17-19 and 24-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims make reference to “first” and “second” “mating structures”. These terms are only evident in the Summary of the Invention and are lacking in the Detailed Description so the Examiner is unsure exactly what applicant is claiming since these features are not referenced to the drawings.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 6, 8, 12-13, 17-19 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent # 4,422,270 to Lapointe et al. (herein referred to as “Lapointe”).

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Regarding claim 1, Lapointe teaches, in Figure 1, a modular stringer for a staircase

wherein the stringer is made up of a plurality of step support units (3) that are matingly coupled. The step supports (3) each have a main structural body (11) and a first mating structure (27) extending laterally from one side of the body (11) and a second mating structure (around 19) extending laterally from the other side of the body (11). The first mating surface (27) of one step support (3) is matingly coupled with the second mating surface (around 19) of another step support (3) so that the adjacent unit (3) is offset from the other.

Regarding claim 2, Lapointe teaches, in Figure 1, that the first mating structure (27) is a male mating structure and the second mating structure (around 19) is a female mating structure.

Regarding claim 6, Lapointe teaches, in Figure 1, the first (27) and second (around 19) mating structures have a pair of corresponding fastening holes (19 and 29) for fastening the first (27) and second (around 19) mating structures together using at least one fastener (37 and 39) through the holes (19 and 29).

Regarding claim 8, Lapointe teaches, in Figure 1, the first (27) and second (around 19) mating structures have a pair of corresponding fastening holes (19 and 29) for fastening the first (27) and second (around 19) mating structures together using at least one fastener (37 and 39) through the holes (19 and 29). The fastener is that of a nut (39) and a bolt (37).

Regarding claim 12, Lapointe teaches, in Figure 1, a plurality of step support units (3).

When three step support units (3) are combined, the middle one becomes an

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intermediary mating member. The intermediary member fits between the first mating structure (27) of one unit (3) and the second mating structure (around 19) of another unit (3).

Regarding claim 13, Lapointe teaches, in Figures 1 and 3, that the stringer system has an upper (9) support unit connected to the floor (P) and a lower support unit that is the ground upon which the stairs rest. The upper (9) support unit has a mating structure for supporting the stairs and the ground supports the stringer at the bottom.

Regarding claim 17, Lapointe teaches, in Figure 1, a plurality of step support units (3) that are matingly coupled to adjacent units in a vertical offset. The step supports (3) create a modular stringer for a staircase and each have a main structural body (11) and a first mating structure (27) extending laterally from one side of the body (11) and a second mating structure (around 19) extending laterally from the other side of the body (11). The first mating surface (27) of one step support (3) is matingly coupled with the second mating surface (around 19) of another step support (3) so that the adjacent unit (3) is offset from the other.

Regarding claim 18, Lapointe teaches, in Figure 1, that the first mating structure (27) is a male mating structure and the second mating structure (around 19) is a female mating structure.

Regarding claim 19, Lapointe teaches, in Figure 1, a kit for construction a modular stringer for a staircase wherein the kit is made up of a plurality of step support units (3) that are matingly coupled. The kit also has steps (7) to be mounted to

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the step support units (3). The step supports (3) each have a main structural body (11) and a first mating structure (27) extending laterally from one side of the body (11) and a second mating structure (around 19) extending laterally from the other side of the body (11). The first mating surface (27) of one step support (3) is matingly coupled with the second mating surface (around 19) of another step support (3) so that the adjacent unit (3) is offset from the other.

Regarding claim 24, Lapointe teaches, in Figure 1, the first (27) and second (around 19) mating structures have a pair of corresponding fastening holes (19 and 29) for fastening the first (27) and second (around 19) mating structures together using at least one fastener (37 and 39) through the holes (19 and 29).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent # 4,422,270 to Lapointe in view of US Patent # 3,195,393 to Uozumi.

Regarding claim 5, Lapointe teaches, in Figure 1, bolts (37) to secure the step support units together (3). The bolts (37) go through the holes (19 and 29) in the support units (3) and secure to nuts (39) on the other side. This is not a fastener with a hole in the distal top with a securing pin fitted through the hole. However, these types of fasteners are well known in the art as evident in the Patent by Uozumi. It

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would have been an obvious matter of design choice to substitute one type of fastener for another type of fastener that is well known in the art. Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

8. Claims 3-4, 7, 9-11, 15 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent # 4,422,270 to Lapointe.

Regarding claim 3, Lapointe teaches, in Figure 1, that the first mating structure (27) has at least one fastener (37) through it and that the second mating structure has a corresponding fastening hole (19) for the fastener (37). The fastener engages the second mating structure (around 19) through the fastening hole (19) thereby fastening the structures together. Lapointe does not teach that the fastener is integral to the first mating structure. However it has been held that the term “integral” is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973).

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 4, Lapointe teaches, in Figure 1, that the fastener (27) is a threaded bolt and it is secured in the corresponding hole (19) with a nut (39). Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 7, Lapointe teaches, in Figure 1, the first (27) and second (around 19) mating structures have a pair of corresponding fastening holes (19 and 29) for

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fastening the first (27) and second (around 19) mating structures together using at least one fastener (37 and 39) through the holes (19 and 29). The fastener is that of a nut (39) and a bolt (37). The nut (39) relieves the mating structures from having to be threaded in order to engage the fastener. However, it would have been obvious to integrate the nut onto the mating structure so that a nut would not be needed and only a bolt to secure the mating structures together. Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 9, Lapointe teaches, in Figure 1, the vertically oriented mating elements (27 and around 19). The mating elements have holes (19 and 29) for receiving a fastener (37) but he does not teach that the holes are vertically elongated. However, in Figures 7 and 8, Lapointe teaches elongated holes, but they are not in the vertical direction but are still used to create adjustability for the stringers (Column 4, Lines 10-12). It would have been obvious to one of ordinary skill in the art to change the orientation of the elongated holes so that they are vertical because it does not affect the function of the elongated holes. Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 10, Lapointe teaches, in Figure 1, that the mounting holes (19 and 29) are in a pair. Lapointe also teaches, in Figures 7 and 8, a pair of mounting holes. It would have been obvious to use a pair of holes to further secure the step

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supports (3) together. Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 11, as per claim 10, Lapointe teaches pairs of mounting holes (19 and 29), the additional holes are predetermined fastening holes. Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 15, Lapointe teaches a modular stringer but he teaches that the step support units are coupled together and then supported at the top and the bottom instead of being fastened to a support structure lining. However, the step support units are capable of being attached to a support structure lining if that was the desired installation method. This may be desirable if the stairs do not have a floor above them to connect to such as in a L-shaped or U-shaped stairs that have a platform in the middle. Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 25, Lapointe teaches, in Figure 1, the vertically oriented mating elements (27 and around 19). The mating elements have holes (19 and 29) for receiving a fastener (37) but he does not teach that the holes are vertically elongated. However, in Figures 7 and 8, Lapointe teaches elongated holes, but they are not in the vertical direction but are still used to create adjustability for the stringers (Column 4, Lines 10-12). It would have been obvious to one of ordinary skill in the art to change the orientation of the elongated holes so that they are vertical because it does not affect the function of the elongated holes. Therefore,

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the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claim 26, as per claim 25, Lapointe teaches that the step support units have elongated holes that allow adjustability in the stringers (Column 4, Lines 10-12).

This would obviously allow adjustable height between the successive steps in the staircase. Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Notice of References Cited (PTO-892) for general state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew J. Triggs whose telephone number is 571-270-3657. The examiner can normally be reached on Monday through Thursday 7:00am - 5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard E. Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./
Supervisory Patent Examiner, Art Unit 3635

/Andrew J Triggs/
Examiner, Art Unit 3635